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Anne Kronenberg  
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May 12, 2014

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, D.C. 20554

RE: PS Docket No. 07-114, Wireless E911 Location Accuracy Requirements

Dear Ms. Dortch,

The Department of Emergency Management of the City and County of San Francisco would like to express its gratitude to the Commission for taking the steps outlined in the February 20, 2014 Further Notice of Proposed Rulemaking to address the urgent need for improved wireless indoor location accuracy.

Wireless calls, usually from indoor locations, are now the prevailing way people in need summon help from 911. As San Francisco explained during the 2013 E-911 Location Accuracy Workshop, in 2000 approximately two percent of 911 calls to San Francisco PSAPS were placed from wireless devices; today more than seventy percent of calls are wireless. Approximately seventy percent of those wireless calls are placed from inside buildings. In other words, one in two calls to San Francisco PSAPs are not adequately supported by current generation location technology.

The Workshop comments from other representatives of the public safety community expressed similar concerns, broadly agreeing that the limitations of current-generation location technologies are having continuing detrimental effects on public safety. As the Commission has acknowledged, the shortcomings of the current E911 location system reach beyond painful anecdotes, they have a direct impact on public health and public safety.<sup>1</sup> Fortunately, the record of the Commission's Wireless E911 Location Accuracy proceeding indicates that the technological and regulatory components are now in place to remedy this situation, and we strongly encourage the Commission to move forward with the proposed rules without delay.

Accurate location information has particular importance to emergency response in San Francisco. First, San Francisco is culturally and linguistically diverse, with dozens of cultures and forty-two

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<sup>1</sup> FNPRM, ¶ 32-34.

different languages. Thirty-eight percent of the population speaks a language other than English. Callers with limited English or that require a translator can find it difficult or impossible to provide their location accurately and quickly enough to assist emergency response. For these and other callers with impaired ability to communicate, precise location information delivered automatically is a needed and essential lifeline.

Second, in a city such as San Francisco, with a population density second only to New York and a natural topography reaching up nearly a thousand feet, accurate vertical location information offers the potential of another very important identifier to allow prompt and accurate emergency response. In dense urban environments with multiple adjacent high-rise buildings, it is imperative to be able to provide the most accurate horizontal and vertical location possible. Based on the results demonstrated in the 2012 CSRIC Working Group 3 Indoor Location Accuracy test bed, at least one technology is already able to locate callers to approximately floor level.<sup>2</sup> We understand that other technologies are also moving toward similar capabilities.<sup>3</sup> Improved latitudinal and longitudinal locational accuracy is urgently needed as a first priority, but utilizing specific vertical location information made available through the E911 system building on more accurate X-Y location data would allow San Francisco to improve our emergency response in potentially significant ways. We therefore urge the Commission to adopt its proposed three-meter vertical accuracy requirement to provide a clear expectation for carriers and public safety personnel.

As an Emergency Dispatch agency, PSAP's have the desire to dispatch at the highest level of accuracy in the shortest period, San Francisco supports the desire to get the lowest time to a location fix. The longer accurate location information is delayed, the less likely it is to assist with the call. PSAP operators are trained to quickly elicit location information from callers, but this process can take valuable time – and potentially a significant amount when callers are disoriented, injured, or otherwise unable to respond verbally.

We thank the Commission for its attention to this critical public safety need and we look forward to the prompt adoption of wireless indoor location accuracy rules. With the clarity of the proposed rules public safety and wireless carriers can work efficiently toward fulfilling the needs of first responders and people who rely on them.

Sincerely,



Robert Smuts  
Deputy Director, Division of Emergency Communications

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<sup>2</sup> See CSRIC Indoor Location Test Bed Report at 36.

<sup>3</sup> See FNPRM, ¶ 72 n.146.